CAR SERVICE BOOKING SYSTEM FOR DAIHATSU MOTOR MALAYSIA (DMM) SERVICE CENTRE

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I hereby declare that I have checked this thesis/project* and in my opinion, this thesis/project* is adequate in terms of scope and quality for the award of the degree of Bachelor of Computer Science (Software Engineering).

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I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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ABSTRAK

Prosedur tempahan semasa di DMM Sales Sdn Bhd adalah berdasarkan tempahan manual, di mana pelanggan mereka perlu membuat panggilan telefon hanya pada waktu perniagaan untuk menempah slot masa. Prosedur ini menyebabkan kesulitan kepada pelanggan dan kakitangan DMM. Oleh itu, Sistem Tempahan Penyelenggaraan Kereta (CSBS) dicadangkan dan dibangunkan yang bertujuan menyediakan kemudahan untuk sistem tempahan servis kereta berasaskan web. Para pelanggan dapat menguruskan proses tempahan mereka sendiri dengan memilih slot masa yang diperlukan di laman web. Ini boleh dilakukan pada bila-bila masa atau tempat selagi pelanggan mempunyai kemudahan internet untuk menyelesaikan proses tempahan. Mereka juga boleh mengemas kini atau membatalkan jika perubahan tempahan diperlukan melalui laman web CSBS tanpa membuat panggilan telefon kepada syarikat. Metodologi yang dilaksanakan untuk projek ini adalah Rapid Application Development (RAD) kerana ia mempercepatkan pembangunan dan mendapatkan maklum balas daripada pengguna pada peringkat awal. Sebaik sahaja aplikasi ini selesai, ia akan diuji kepada klien untuk ujian penerimaan pengguna (UAT) untuk memastikan bahawa semua fungsi berjalan mengikut keperluan yang diberikan. UAT mendedahkan bahawa sistem aplikasi yang dicadangkan telah mencapai matlamat dan dapat menyelesaikan masalah manual seperti yang dihadapi.

ABSTRACT

The current practice of booking procedure in DMM Sales Sdn Bhd is based on manual booking, where their customer needs to make a telephone call only in business hours to book for a time slot. This procedure caused difficulties to both DMM customer and staff. Therefore, Car Service Booking System (CSBS) is proposed and developed which aim to provide a facility for a web-based car servicing booking system. The customers able to manage their own booking process by selecting the required time slot at the website. This can be done at any time or place as long as the customer has internet facility to complete the booking process. They also able to update or cancel if changes of booking are required through CSBS website without making phone calls to the company. The methodology implemented for this project is Rapid Application Development (RAD) since it speeds up the development and obtain feedback from users at early stage. Once the application is completed, it is tested to the client for user acceptance test (UAT) to ensure that all function work according to the given requirements. The UAT disclosed that the proposed application system has achieved the objective and able to solve the problem of manual as faced.

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LIST OF ABBREVIATIONS

DMM	Daihatsu Motor Malaysia
RAD	Rapid Application Development
PHP	Hypertext Pre-processor
CSBS	Car Service Booking System
SRS	Software Requirement Specification
SDD	Software Design Document
ERD	Entity Relationship Diagram
MySQL	My Structured Query Language

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Management systems are systematic structure designed to manage an organization's policies, procedures and processes and develop continuous improvement within. It widely used because it helps to perform all the tasks required to accomplish an objective. Most of the organization will have their own management system to help their task done easily.

In this project, it focuses on managing online booking. Online booking system is one of the important parts in the management system since it will help customer to manage a booking easily compared to manual booking. Besides, online booking can reduce the resources such as money and time.

This booking system is focuses on car service and it designed for DMM Sales Sdn Bhd. DMM is known as “The Largest Perodua Dealer in Malaysia” and this system is focus on DMM Service Centre since they still using manual booking either through phone call or walk-in. Other companies such as Proton or Toyota, they already have their own car service booking system to facilitate the user to manage the booking car service. In order to achieve the same standard, DMM company should have their own booking system for car services.

Manual management system that have been used by DMM Service which led to several issues such as work performance and efficiency. Due to lack of staff, the company will not able to manage booking for multiple customers and the same time and it will

affect the production of car services and customer's satisfaction. Therefore, a computerized car service booking system is developed.

The record in car service booking system can be used for data analysis. The user for customer of this system can view their yearly car services and the admin can view the profit or production of their company so that they can improve their performance in future.

1.2 Problem Statement

The current implementation of DMM booking for car maintenance service is done manually. Due to this implementation, customer need to book during office hour through phone call between 8.00am to 5.00pm which might turn for some customer are not able to book because they are very busy during that hour.

Next, sometimes staff of service company need to entertain many customers at their office and not able to pick up the phone call. So, most customer decide to walk-in if they not able to book through phone call without acknowledge the company. As the result, they need to wait for people that have book previously.

Lastly, staff may record an inaccurate information such as number plate or phone number during the conversation through phone call. So, when customer came for service, they find out that their car is not booking yet.

1.3 Objective

The objectives of this project are:

i. To study the process of existing car service booking system and propose suitable modules for web-based application.
ii. To develop a prototype of web-based car service booking system.
iii. To test the user acceptance for proposed prototype.

1.4 Scope

The scopes for this project are:

i. Car service booking system are developed as web-based application.
ii. The target area is in car service company which consist of customers and staff.
iii. Car service booking system is aimed for DMM service center where the users are administrator, DMM staff (service advisor) and customer (owner of the car).

1.5 Report

This report consists of the five chapters which are Introduction, Literature Review, Methodology, Result and Discussion and Conclusion. Chapter one discusses on the introduction of the project. It covers the background of the study, problem statement, objective of the project and scope.

Chapter 2 is discussing on the literature review for the project. Literature review contains the information about technique/method/hardware or technologies which suitable to be adapted into the project.

Chapter 3 is discussing on the overall approach and framework of the project. It covers method, techniques or approach to be used and include introduction, methodology, hardware or software, Gantt chart and testing plan.

Chapter 4 is discussing on result of finding based on the testing that have been done. It also includes the explanation of the discussion that shows the objectives of this project is fulfilled.

Lastly, Chapter 5 is discussing the conclusion of overall project. It includes the research constraints during the development and future work for system improvement.

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